

Notice of Allowability**Application No.**

10/644,227

Applicant(s)

TAFT ET AL.

Examiner

Art Unit

Bruce F. Bell

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to the amendment and terminal disclaimer dated November 23, 2004.
2. The allowed claim(s) is/are 30-44.
3. The drawings filed on 21 August 2003 are accepted by the Examiner.
4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some* - c) Noneof the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
Paper No./Mail Date _____.
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 11/23/04
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Cancel Claims 1-29 and 45-50.

This application is in condition for allowance except for the presence of claims 1-29 and 45-50 to an invention non-elected without traverse. Accordingly, claims 1-29 and 45-50 have been cancelled.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

The prior art of record fails to teach and/or suggest a method of fabricating a composite electrolyte by applying onto a surface of a substrate a viscous liquid composition of an inorganic cation exchange material, a silica based material, a polymer based material and a solvent-dispersant, spreading the viscous liquid to form a uniform thickness layer the substrate and evaporating the solvent to yield a composite electrolyte with an inorganic cation exchange material of between 0.1 to 99% by weight. The closest prior art to Tsai et al shows a modified clay mineral that is manufactured of a polymer/clay nanocomposite having a polymer matrix and a layered clay mineral uniformly dispersed in the polymer matrix, with the layered clay mineral being intercalated with a catalyst. This prior art does not show applying this mixture onto a

substrate, nor does it teach that the materials when mixed together is a viscous liquid composition, nor that the viscous liquid is uniformly spread onto a substrate and evaporated. In fact, the prior art of Tsai et al appears to not to admix the materials, but instead make each material, dry and grind it, to then make a subsequent material and then makes a final product material composite which does not appear to be an electrolyte, since the final material has an electrically conductivity, rather than an ionic conductivity, which is respective on an electrolyte membrane.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce F. Bell whose telephone number is 571-272-1296. The examiner can normally be reached on Monday-Friday 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BFB
January 10, 2005

Bruce Bell
Bruce F. Bell
Primary Examiner
Art Unit 1746